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PARTNERS; 5.1 HISTORY

5.2 CLINICAL DECISION SUPPORT AND INPATIENT CPOE AT BWH 5.3 DECISION SUPPORT DELIVERED USING THE OUTPATIENT ELECTRONIC HEALTH RECORD; 5.4 OVERARCHING STUDIES; 5.5 OVERARCHING LESSONS; 5.6 FUTURE DIRECTIONS; REFERENCES; Chapter 6 CASE STUDIES IN CLINICAL DECISION SUPPORT: LDS HOSPITAL EXPERIENCE; 6.1 INTRODUCTION; 6.2 TOOLS FOR INFORMATION MANAGEMENT; 6.3 TOOLS FOR FOCUSING ATTENTION; 6.4 TOOLS FOR PATIENT-SPECIFIC CONSULTATION; 6.5 CONCLUSION; REFERENCES; Chapter 7 PENETRATION AND AVAILABILITY OF CLINICAL DECISION SUPPORT IN COMMERCIAL SYSTEMS; 7.1 INTRODUCTION 7.2 CD'S PENETRATION AND AVAILABILITY IN COMMERCIAL SYSTEMS 7.3 CLINICAL ALERTING IN 2002; 7.4 OBSTACLES TO CD'S IN 2002; 7.5 WHAT CHANGED SINCE EARLY 2002?; 7.6 HOW FAR ALONG ARE CD'S VENDORS IN 2005?; 7.7 SELF-REPORTED VENDOR DATA AS OF FEBRUARY 2005; 7.8 CONCLUSION; REFERENCES; VENDOR WEB SITE REFERENCES; Chapter 8 LESSONS LEARNED; 8.1 ACADEMIC PROTOTYPES; 8.2 STANDARDS AND SHARING OF INTEROPERABLE CONTENT AND TOOLS; 8.3 USERS; 8.4 OTHER CONSIDERATIONS; REFERENCES; PART III GENERATION AND FORMULATION OF KNOWLEDGE; Chapter 9 HUMAN-INTENSIVE TECHNIQUES; 9.1 INTRODUCTION 9.2 THEORETICAL BASIS FOR KNOWLEDGE ACQUISITION 9.3 COGNITIVE TASK ANALYSIS; 9.4 COMPUTER-BASED KNOWLEDGE ACQUISITION; 9.5 CONCLUSION; REFERENCES; Chapter 10 GENERATION OF KNOWLEDGE FOR CLINICAL DECISION SUPPORT: STATISTICAL AND MACHINE LEARNING TECHNIQUES; 10.1 INTRODUCTION; 10.2 LEARNING FROM DATA; 10.3 OVERVIEW OF LOGISTIC REGRESSION; 10.4 OVERVIEW OF SOME MACHINE LEARNING MODELS; 10.5 PREDICTION MODELS IN MEDICINE; 10.6 CONCLUSION; REFERENCES; Chapter 11 EVIDENCE-BASED MEDICINE AND META-ANALYSIS: GETTING MORE OUT OF THE LITERATURE; 11.1 SYSTEMATIC REVIEWS AND META-ANALYSES 11.2 METHODOLOGIES OF SYSTEMATIC REVIEW AND META-ANALYSIS

Sommario/riassunto

This book examines the nature of medical knowledge, how it is obtained, and how it can be used for decision support. It provides complete coverage of computational approaches to clinical decision-making. Chapters discuss data integration into healthcare information systems and delivery to point of care for providers, as well as facilitation of direct to consumer access. A case study section highlights critical lessons learned, while another portion of the work examines biostatistical methods including data mining, predictive modeling, and analysis. This book additionally addresses organization
